



4 Alternatives

This chapter describes the four trails and bikeways alternatives being considered, and summarizes the similarities and differences between the alternatives. Existing designated trail corridors are described, along with proposed changes and new trail corridors. In addition, the overall trails and bikeways networks for each alternative are described and illustrated.

ALTERNATIVE DESCRIPTIONS

Three action alternatives have been identified that would meet the project purpose and need, as well as the goals and objectives outlined in Chapter 2. In order to meet all of the goals and objectives within all of the alternatives, the action alternatives use similar strategies to improve the trail system, and differ primarily in the type of user experience they provide.

No Action Alternative

Alternative A is the No Action Alternative, which represents the Presidio's current trails and bikeways network. The No Action Alternative is distinct from the other alternatives in that it assumes that no comprehensive changes or major new trail building would take place for the next 20 years.

The Action Alternatives

Alternatives B, C and D are the Plan's action alternatives:

- Alternative B: Mixed Use (Preferred Alternative)
- Alternative C: Shared Use
- Alternative D: Dispersed/Single Use

All of the action alternatives would provide a wide range of differing experiences, from quiet solitude to an urban promenade experience. Action alternatives would create strong connections between the entrances and major points of interest, and allow various opportunities for travel between these points.

Improved connections between residential areas, employment centers, and transit stops would help reduce the number of automobile trips within the Presidio, and provide safer and more convenient routes for residents, employees, neighbors, and visitors. Primary trailheads would be located at high use areas with automobile parking. No parking areas would be provided at secondary trailhead locations.

All action alternatives would increase opportunities for access to, and/or interpretation of, historic and cultural resources. For example, trail destinations include places such as El Polin Springs, Fort Scott,

historic sites at the Main Post, and the Presidio Stables, which are all important to the Presidio's history. Better access is proposed to Fort Point from the Golden Gate Bridge Plaza, as well as extending the Golden Gate Promenade to the Fort. Historic batteries along the coast, including Batteries Cranston, McKinnon-Stotsenberg, Godfrey, Crosby, and Chamberlin, would be connected by the trail system. A new trail would be routed alongside Battery McKinnon-Stotsenberg to increase opportunities for interpretation. An existing trail would be rerouted around Battery East to prevent further degradation of the historic earthworks there. Rehabilitation of the Lovers Lane trail would reveal that portion of the Presidio's history.

In addition, all action alternatives would include the following:

- Trailhead locations which are coordinated with shuttle stops.
- Multi-use paths for regional trails including the Bay Area Ridge Trail, Anza National Historic Trail, the San Francisco Bay Trail and American Discovery Trail (a shared alignment) and the California Coastal Trail.
- Pedestrian trails separated from the roads in many areas, to provide opportunities for solitude.

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- A comprehensive network of on-street bikeways.
- Approximately half of the mapped 9+ miles of social trails will become designated trails, and half will be restored to vegetated open land.

All action alternatives propose about 30 miles of newly designated trails; however the alternatives provide substantially different user experiences. The alternatives vary in the proposed amount of pedestrian trail versus multi-use trails, and how those miles are dispersed throughout the Presidio.

In the text and illustrations which follow, the alternatives are described in two ways: first by describing principal trail corridors, and second by describing the entire network of trails, divided into pedestrian, multi-use, and bike trails. In some cases, trail corridors follow existing trails, such as the Anza Trail, or the Bay Area Ridge Trail. In other cases, the trail corridors are "new." New corridors may not require construction of new trails, but instead involve designation and improvement of existing, disconnected trails or social trails as a named, continuous corridor. Generally, new corridors would require some improvement of social trails to provide a consistent, connected experience. All alternatives

use the same named trail corridors, and differ only in the treatment of the trails within those corridors. There are additional trails that connect the named corridors, and these also vary within each alternative.

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CHANGES TO EXISTING TRAIL CORRIDORS

California Coastal Trail Corridor



The existing California Coastal Trail will eventually traverse the entire Pacific coastline of California. The 4.8 kilometer (3 mile) section through the Presidio travels along the coastal bluffs, which support some of the most intact natural habitat in the Presidio and provide expansive views of the Pacific coastline. The trail provides access to gun batteries built in the 1890s for coastal defense and abandoned after World War II. The batteries are scattered along the bluffs from Golden Gate in the north to Battery Chamberlin at Baker Beach.

Currently classified as a pedestrian trail and City Bike Route, the trail is accessed from the Golden Gate Bridge Plaza, Battery Godfrey parking area, and Baker Beach. No formal trailheads exist.

At its north end, the trail merges with the Bay Area Ridge Trail as it approaches the Golden Gate Bridge. Widths vary from 0.9 meters to 2.4 meters (3 feet to 8 feet). The trail surface also varies from bare earth to gravel on portions that are used as maintenance roads.

The middle section of the trail is a narrow 0.6 meters to 1.5 meter wide (2 feet to 5 feet) dirt path immediately adjacent to Lincoln Boulevard. At the southern end near Baker Beach, the trail drops down to the ocean on an existing gravel maintenance road, connecting to Battery Chamberlin and the parking area. A parallel social trail exists immediately west of the guardrail on Lincoln Boulevard.

The Coastal Trail is also City of San Francisco Bike Route #95. This bike route enters the Presidio at the 25th Avenue Gate and travels along Lincoln Boulevard to Merchant Road and the Golden Gate Bridge, primarily as a Class III shared roadway.

Proposed Improvements

All action alternatives propose the following improvements where feasible, given topography and other factors:

- New trailheads at the bridge plaza, and at the 25th Avenue Gate.
- A new multi-use trail on the west side of Lincoln Boulevard.
- Reconfigure Bowman Road as a new multi-use trail east of Batteries Cranston and Marcus Miller, connecting to the Golden Gate Bridge.
- A new multi-use trail along Bowley Street.
- A new multi-use loop trail at Battery Chamberlin and Baker Beach.
- A new bikeway on either side of Lincoln Boulevard (SF bike route #95) from the Golden Gate Bridge to the 25th Avenue Gate.
- A new direct bike route to the Golden Gate Bridge via a multi-use trail.

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Variations Between Alternatives

In addition to the above, Alternatives B and D would provide:

- Redevelopment of the existing pedestrian trail west of Batteries Cranston and Marcus Miller.

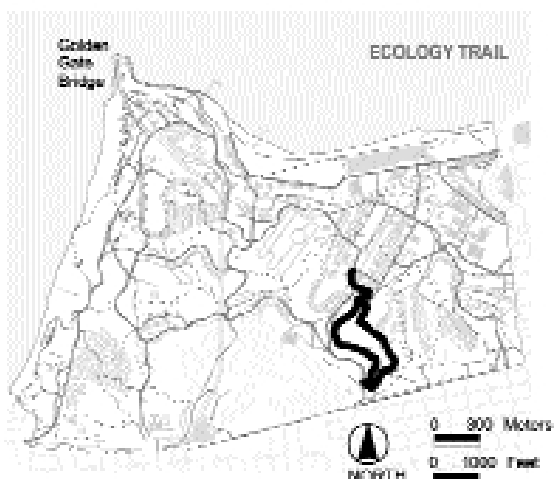
Alternative C would provide:

- Closure of the pedestrian trail to the west of the coastal batteries.

Alternative D would provide:

- A new pedestrian trail from the Golden Gate Bridge to the Lincoln Boulevard and Ralston Street intersection.

Ecology Trail Corridor



The existing Ecology Trail is a low slope 3.2 kilometer (2 mile) hike that provides access to some of the less developed areas of the Presidio. The trail begins behind the Officers' Club at the Main Post, and travels through a forest of eucalyptus, cypress, and redwoods to the overlook at Inspiration Point. From there the trail loops past serpentine grassland supporting endangered plant communities, to Quarry Road and back to the Main Post. A spur connects to El Polin Springs.

Informal social trail access is available at the north end from a hidden parking lot at Funston Avenue and Hardie Street. Informal social trail access also is available from Barnard Avenue near Pop Hicks Field. Access from the south is provided at Inspiration Point and at several points along West Pacific Avenue.

In its existing configuration, the upper section of the corridor is a packed earth pedestrian trail ranging from 0.9 meters to 3 meters wide (3 feet to 10 feet). The lower section runs along the abandoned Quarry Road alignment. Inspiration Point and El Polin Springs are major destinations.

Bicycles are not permitted on any portions of the Ecology Trail. With no trail controls, however,

bicyclists currently use the trail.

Proposed Improvements

All action alternatives would provide for relocation of the Main Post trailhead to the intersection of Arguello Boulevard and Moraga Avenue; and would improve wheelchair accessibility.

Variations Between Alternatives

In addition to the changes proposed above, Alternatives B and C would provide:

- An accessible connection to the south of the new trailhead at Inspiration Point.
- A new multi-use trail from the Main Post trailhead to Barnard Avenue, Hicks Road, and Quarry Road.
- Redevelopment of Quarry Road as a multi-use trail.

Alternative D would provide:

- An incompletely accessible connection.
- New pedestrian trails connecting to Arguello Boulevard behind the Officers' Club.
- Reconfiguration of Quarry Road as a pedestrian trail.

Bay Area Ridge Trail



A new 4 kilometer long (2.5 mile) segment of the Bay Area Ridge Trail was opened in 1999. The trail enters the Presidio from the south at the Arguello Gate, and accommodates both hikers and bicyclists. The trail connects with the Anza Trail at Washington Boulevard, and the California Coastal Trail near the Golden Gate Bridge. Along with the Golden Gate Promenade, the trail's sections near the Arguello Boulevard/Washington Boulevard intersection and through Rob Hill provide the Presidio's only official off-street multi-use trails.

The Presidio Golf Course provides trailhead parking for southern access to the trail. The

Battery East parking area provides access from the Golden Gate Bridge area.

In its current configuration, the off-street multi-use trail near Arguello/Washington Boulevards is surfaced with recycled paving materials and varies between 2.4 meters and 3 meters in width (8 feet to 10 feet). The Rob Hill section is on a gravel-surfaced service road and is 3.3 meters to 7.5 meters wide (11 feet to 25 feet). At Fort Scott, the multi-use trail divides into a shared service roadway for bicycles, and a wide, interior sidewalk for pedestrians. Another pedestrian section of the Bay Area Ridge trail is located to the west of the coastal batteries.

The on-street portions of the Bay Area Ridge Trail are designated as City of San Francisco Bike Route #65. This bike route enters the Presidio at the Arguello Gate and converges with the Coastal Trail at Lincoln Boulevard and Merchant Road.

Proposed Improvements

All action alternatives would provide the following improvements where feasible given topography and other factors:

- Improvements to the Golf Course trailhead.
- A new multi-use trailhead on the north side

of Washington Boulevard.

- Striped bike lanes on both sides of Arguello Boulevard and Washington Boulevard (SF Bike Route #95)
- A shared roadway on Kobbe Avenue and Greenough Avenue, and on the Ralston service road.

Variations Between Alternatives

In addition to the improvements listed above, Alternative B would provide:

- A new alternate pedestrian route through woods from Nauman Road near the cemetery to Rob Hill.
- A replacement for the Rob Hill alignment with a new multi-use trail south of Battery McKinnon-Stotsenberg and along Washington Boulevard.
- Improvements to the Rob Hill pedestrian trail, routing traffic around the campground.
- Retention of the existing alignment through Fort Scott.
- An improved Lincoln Boulevard crossing at Storey Avenue and connection to the Coastal Trail at Battery Boutelle.

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- Consideration of weekend closures to visitors' automobiles on Washington Boulevard from Park Avenue to Battery Caulfield Road.

Alternative C would provide:

- A new multi-use alternate route from Nauman Road near the cemetery to Fort Scott.
- Improvements to the Rob Hill alignment as a multi-use trail to the south of Battery McKinnon-Stotsenburg and along Washington Boulevard.
- A new multi-use trail connecting to Greenough Avenue and Fort Scott and a multi-use loop trail in the interior of Fort Scott.
- A re-route of the trail to an improved Lincoln/Merchant intersection with a new multi-use trail connection to the Coastal Trail.

Alternative D would provide:

- A realigned pedestrian trail to the south side of Washington Boulevard and upgrades to the existing roadside path to meet accessibility standards.

- A new pedestrian trail south of Battery McKinnon-Stotsenburg.
- Reconfiguration of the existing multi-use trail from Compton Road to Hunter Road and Rob Hill as a pedestrian trail.

Juan Bautista de Anza National Historic Trail

The Anza trail was established in 1990 to commemorate the route followed by the Juan Bautista de Anza in 1775-76, when he led a contingent of 30 soldiers and their families to found a presidio and mission at San Francisco Bay. In 1999, it was named a National Millennium Trail. The national trail starts in Nogales, Arizona,

and travels northwest to the Presidio of San Francisco, California.

Although a formal trailhead has not yet been constructed, the existing trail can be accessed from the Mountain Lake and Coastal Batteries parking areas and from the Golden Gate Bridge.

Approximately three miles of trail from Mountain Lake to Fort Point have been marked. From Mountain Lake to Wedemeyer Street, the trail is a 4.8 meter to 7.5 meter wide (16 feet to 25 feet) asphalt paved service roadway. In the Battery Caulfield Road corridor, the trail occurs on sidewalks or in the roadway. At Washington Boulevard, it converges with the Bay Area Ridge Trail.

The Juan Bautista de Anza Trail is designated as City of San Francisco Bike Route #69. The bike route enters the Presidio at the 14th Avenue Gate and travels along Battery Caulfield Road, converging with the Bay Area Ridge Trail at Washington Boulevard.

Proposed Improvements

All action alternatives would provide the following improvements where feasible given topography and other factors:

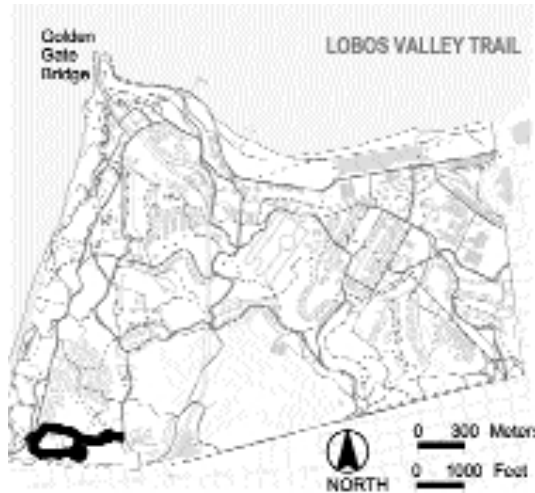
- A new trailhead with parking and an overlook constructed near the 15th Avenue Gate.
- Reconfiguration of the Mountain Lake/Public Health Service Hospital service roadway and parking lot as a multi-use trail.
- A connection to the Bay Area Ridge Trail at Washington Boulevard via a multi-use trail along Wedemeyer Street and Battery Caulfield Road.
- A shared roadway for bicycles along Battery Caulfield Road.

Variations Between Alternatives

In addition to the improvements listed above, Alternative D would provide:

- A new accessible pedestrian trail with an off-street alignment on upper Battery Caulfield Road.
- A new pedestrian trail along the west side of Washington Boulevard.

Lobos Creek Valley Trail Corridor



Containing one of the last free-flowing creeks in San Francisco, Lobos Creek Valley provides important native plant and wildlife habitat. It also provides a source of water for the Presidio. An 800 meter (0.5 mile) long boardwalk winds around a parking lot and Trust maintenance facilities. The existing boardwalk passes through a recently restored dune habitat planted with native species. A sandy social trail at a slightly higher elevation leads to the 15th Avenue Gate and the Anza Trail. The creek cannot be seen or accessed from the current alignment.

In its existing configuration, the trail consists of a 1.4 meter wide (54 inch) boardwalk, constructed of recycled plastic lumber. It travels through restored dunes and native plantings in an

alignment near Lobos Creek, which is protected by a high fence. The upper portion of the trail is between 1.5 meters and 4.5 meters wide (5 feet to 15 feet) and sand based. Social trails to the west of Lincoln Boulevard provide links to south Baker Beach. The trailhead for the lower trail is located near the 25th Avenue Gate. Bicycles are not permitted on any portion of the Lobos Creek Valley Trail.

Proposed Improvements

All action alternatives would provide the following improvements where feasible given topography and other factors:

- A new trailhead at Baker Beach.
- Relocation of the trailhead at the intersection of Lincoln Boulevard and Bowley Street.
- A new creekside overlook on a gated spur for ranger-led tours.
- Realignment of the trail in steep areas to provide greater accessibility.
- Stabilization of the surface of the upper trail.
- A new east-west route from the Anza Trail to the Coastal Trail through the Wherry Housing area.

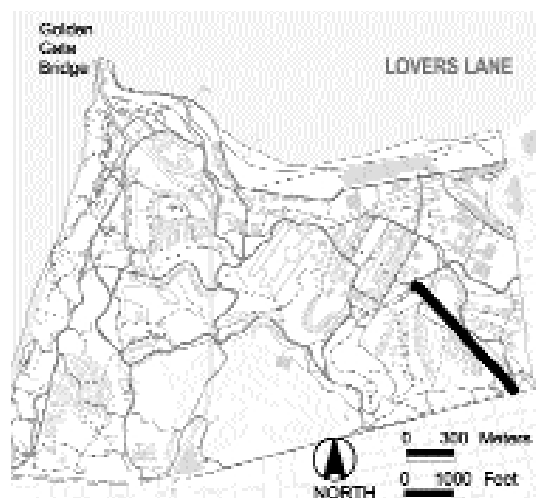
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Variations Between Alternatives

In addition to the above improvements, Alternative D would provide:

- Improvements to the existing social trail from upper Lobos Creek Valley Trail to the new pedestrian alignment of the Anza Trail.

Lover's Lane



Lover's Lane is one of the oldest foot trails in the Presidio. The existing trail begins at Funston Avenue and Presidio Boulevard. It crosses a tiny brick footbridge over El Polin Creek. From there, it passes enlisted men's and officers' houses dating from the 1930s, and ends at the Presidio Boulevard Gate. Historically, the path continued

three miles southwest to Mission Dolores, and connected the Spanish presidio to the mission.

In its current configuration, the trail consists of a shared roadway and sidewalk at Presidio Boulevard in the Main Post area, and a 1.2 meter to 1.8 meter wide (4 feet to 6 feet) pedestrian trail connecting to MacArthur Drive. A 1.2 meter to 2.4 meter wide (4 feet to 8 feet) paved pedestrian trail then leads to the Presidio Boulevard Gate.

Trailhead parking is provided near the intersection of West Pacific Avenue and Presidio Boulevard. The trail can also be accessed from the Main Post. Bicycles are not permitted on Lover's Lane. The trail is not accessible.

Proposed Improvements

All action alternatives would provide the following improvements where feasible given topography and other factors:

- A new pedestrian trailhead at the Main Post.
- A new trailhead for a multi-use segment at the junction of Presidio Promenade near Lincoln and Presidio Boulevards.
- A new pedestrian connection to the Main Post Visitor Center.
- Enhancements consistent with the historic character along the entire corridor.

- Bike lanes on both sides of Presidio Boulevard, except for an uphill bike lane along Presidio Boulevard between Simonds Loop and Pacific Avenue.

Variations between Alternatives

In addition to the improvements listed above, Alternative B would provide:

- A multi-use trail along MacArthur Avenue, Morton Street and Clarke Street.
- Reconfiguration of the existing social trail to the west of Presidio Boulevard as multi-use trail.
- A multi-use trail along MacArthur Avenue, Morton Street, and Clarke Street.

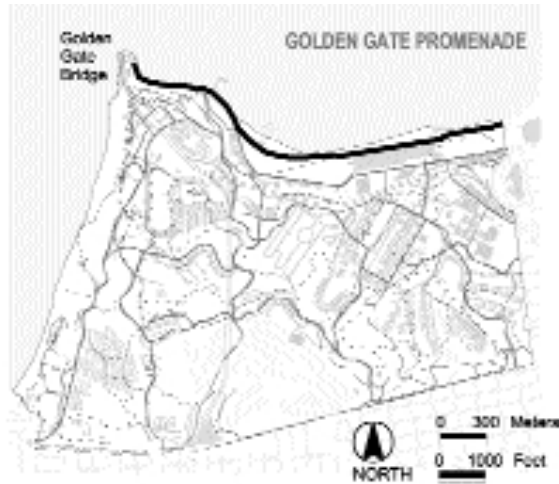
Alternative C would provide:

- A new multi-use trail to the east of Lover's Lane from MacArthur Avenue to Simonds Loop.

Alternative D would provide:

- No multi-use trails in the Lover's Lane corridor.
- Reconfiguration of the existing social trail to the west of Presidio Boulevard as a pedestrian trail.

Golden Gate Promenade



The existing Golden Gate Promenade provides access to the newly restored tidal marsh and beaches along Crissy Field. Trails are used both by pedestrians and bicyclists. The trails offer expansive views and access to water birds, native plants, and sandy beaches. The 6.4 kilometer (4 mile) long Golden Gate Promenade is part of the San Francisco Bay Trail – a planned recreational corridor that will provide a continuous 640 kilometer (400 mile) network of bicycling and hiking trails around San Francisco and San Pablo Bays. The Bay Trail will connect the shoreline of all nine Bay Area counties, link 47 cities, and cross the major toll bridges in the region. To date, approximately 336 kilometers (210 miles) of the

alignment, or slightly more than half the Bay Trail's ultimate length, have been completed. The Bay Trail will provide a commute alternative for bicyclists, as well as connections to numerous public transportation facilities, including ferry terminals, light-rail lines, bus stops, Caltrain, Amtrak, and BART.

In its current configuration, the multi-use trail, which begins at the Marina Boulevard entrance to the Presidio, is 9 meters wide (30 feet) with 6 meters (20 feet) of paved trail and 3 meters (10 feet) of unpaved trail. From Fort Point Wharf to Fort Point both cyclists and pedestrians share Marina Drive with automobiles.

The City of San Francisco's Bike Route #2 parallels the Golden Gate Promenade while it travels along Old Mason Street, Crissy Field Avenue, Long Avenue, and Marine Drive to Fort Point.

This corridor is the same for all action alternatives.

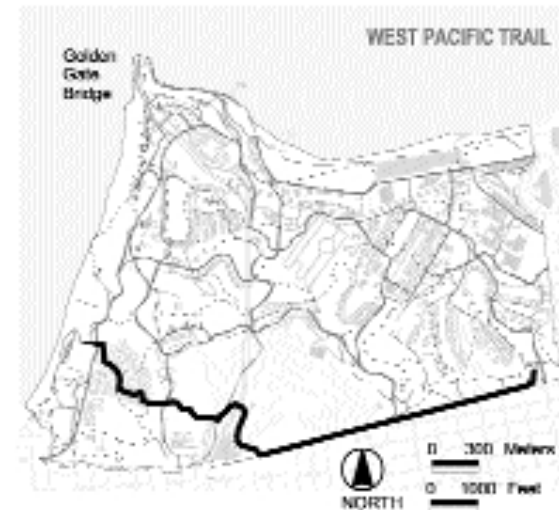
Proposed Improvements

All action alternatives would provide the following improvements where feasible, given topography and other factors:

- New trailheads at the Golden Gate Bridge Plaza and Fort Point.

- A marked pedestrian trail from Fort Point Wharf to Fort Point.
- A Class III shared road for cyclists along Marine drive (SF Bike Route #2).
- An uphill bike lane on Long Avenue.
- A two-way Class I bike lane along the west bluff parking lot near the Warming Hut.

West Pacific/Mountain Lake Corridor



West Pacific Avenue and Mountain Lake are located at the southern edge of the Presidio. In 1776, Mountain Lake was the original campsite of the Anza settlement party. It later became a source of fresh water for San Francisco. Much of the

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lake's shoreline was buried in the 1930s to provide a freeway approach to the Golden Gate Bridge. An existing multi-use trail and bikeway along the western portion of West Pacific Avenue provides access to Mountain Lake from the Arguello Gate. An off-street pedestrian trail along the eastern portion of West Pacific Avenue currently provides a link from the Arguello Gate to the Presidio Boulevard Gate as it passes by Julius Kahn Playground, Lover's Lane, and portions of the Presidio Forest.

In its current configuration, the trail consists of a 1.5 meter to 4.5 meter wide (5 feet to 15 feet) trail along West Pacific Avenue from Presidio Boulevard to Arguello Boulevard. The unmarked trail passes through the Presidio Golf Course parking lot and along a service road to Mountain Lake and the former Public Health Service Hospital. The upper Lobos Creek Valley Trail and adjacent social trails provide connecting links to the Anza Trail, Baker Beach Housing, and the California Coastal Trail.

Bicycles currently share the roadway with cars along West Pacific Avenue from the Presidio Boulevard Gate to 5th Avenue. Both bicyclists and pedestrians share the service road to Mountain Lake.

Proposed Improvements

All action alternatives would provide the following improvements where feasible, given topography and other factors:

- Reconfiguration of the existing pedestrian trail to a multi-use trail along West Pacific Boulevard from Presidio Boulevard to Arguello Boulevard.
- Reconfiguration of the Presidio Golf Course parking lot to provide a continuous multi-use trail from Arguello Boulevard to Mountain Lake.
- A new multi-use trail from Lobos Creek Trailhead to the Baker Beach picnic area.
- Class III shared bikeway and traffic calming measures on West Pacific Boulevard.

Variations Between Alternatives

In addition to the improvements described above, Alternative B would provide:

- A new pedestrian trail between the Ecology Trail and Lovers Lane. The segment from the Ecology Trail to Paul Goode Field would be new construction, while the segment from Paul Goode Field to Lovers Lane would reconfigure the existing service road and social trail.

Alternative C would provide:

- A new multi-use trail between the Ecology Trail and Lovers Lane. The segment from the Ecology Trail to Paul Goode Field would be new construction, while the segment from Paul Good Field to Lovers Lane would reconfigure the existing service road and the social trail.
- Upgrades to the social trail on the north side of the Public Health Service Hospital to a multi-use trail with connections to the Anza Trail.
- A new multi-use trail from the Anza Trail to Lincoln Boulevard and a new multi-use trail connecting to the Upper Lobos Creek Valley trail.

Alternative D would provide:

- Improvements to the existing pedestrian trail along West Pacific Boulevard from Presidio Boulevard to Arguello Boulevard.
- An additional pedestrian trail connection with the upper portion of the Lobos Creek Valley Trail and with the Anza Trail on upper Battery Caulfield Road.

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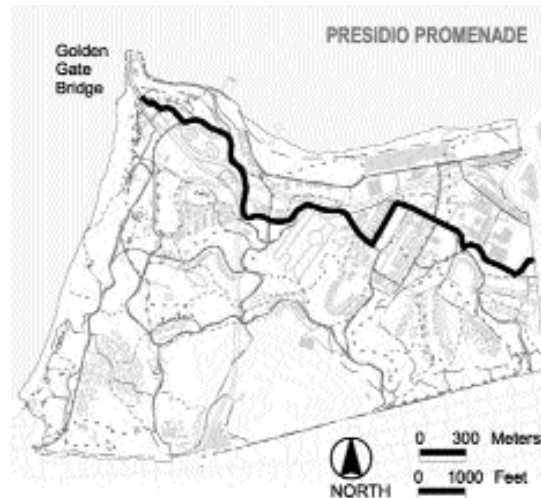
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NEW TRAIL CORRIDORS

Presidio Promenade



The new Presidio Promenade corridor would follow Lincoln Boulevard, which links many of the cultural and historic resources of the Presidio, including the Golden Gate Bridge at the northwest reaches of the park, Fort Scott, the Cavalry Stables, the San Francisco National Cemetery, the Main Post, and the Visitor Center. Presidio Boulevard, Letterman Avenue, and Lombard Street would also be included in the corridor, and would connect the Main Post to the historic Lombard Gate and the Letterman Complex at the park's eastern edge.

historical resources, the new Presidio Promenade With would become a primary route for visitors, residents, and tenants. It would provide a continuous multi-use trail and bikeway from the Golden Gate Bridge to the new Greenwich Street Gate, designed to accommodate pedestrians and bicycles only. Visitors arriving by foot, bicycle, public transportation, or automobile from either the north or the east would have easy access to most other major Presidio trail corridors.

Trailheads would be provided at Golden Gate Bridge Plaza, the Visitor Center at the Main Post, and inside the Lombard Avenue and Greenwich Street Gates.

Proposed Improvements

All action alternatives would provide:

- New trailheads at Golden Gate Bridge Plaza, Battery East, the Main Post Visitor Center, and inside the Lombard and Greenwich Gates.
- A multi-use "shortcut" south of the stables that connects to Lincoln Boulevard, with the Patten Road segment reconfigured as a multi-use trail.
- A new pedestrian trail on Lincoln Boulevard west of McDowell Street.

- A connection from the trailhead at Greenwich Gate with a multi-use trail along Lincoln Boulevard and Letterman Drive.

Variations Between Alternatives

In addition to the improvements listed above, Alternatives B and C would provide:

- A new multi-use trail from Fort Point overlook to the Golden Gate Bridge Visitor Center along the existing maintenance road.
- A multi-use trail on Battery East Road from the Golden Gate Bridge Visitor Center to Battery East, continuing on the north side of Lincoln Boulevard.
- A new multi-use trail on the northeast side of Montgomery Street connecting to the Main Post and the Visitors Center.

Alternative D would provide:

- A connection from Fort Point overlook to the Golden Gate Bridge Plaza with a new pedestrian trail along the existing road.
- An alternative pedestrian route between Battery East and the Long/Lincoln intersection on Andrews Road.

- A new pedestrian trail along Sheridan Avenue to connect with the Main Post and the NPS Visitor Center.
- A connection from the NPS Visitor Center to Lincoln Boulevard with pedestrian trails as part of the Main Post rehabilitation.

Park Boulevard Trail



The new Park Boulevard corridor would follow Park Boulevard, which is a major north-south connector. The corridor travels through significant portions of the Historic Forest – a mature forest of pine, cypress, and eucalyptus, planted by the army from the 1880s through the 1940s. The new multi-use trail would connect Mountain Lake with Presidio and Golden Gate Promenades.

Proposed Improvements

All action alternatives would provide:

- Improvements to the existing Mountain Lake trailhead.
- Bike lanes on both sides of Park Boulevard between Washington and Lincoln Boulevards.
- Bike lanes on both sides of McDowell Avenue.

Variations Between Alternatives

In addition to the above improvements, Alternatives B and C would provide:

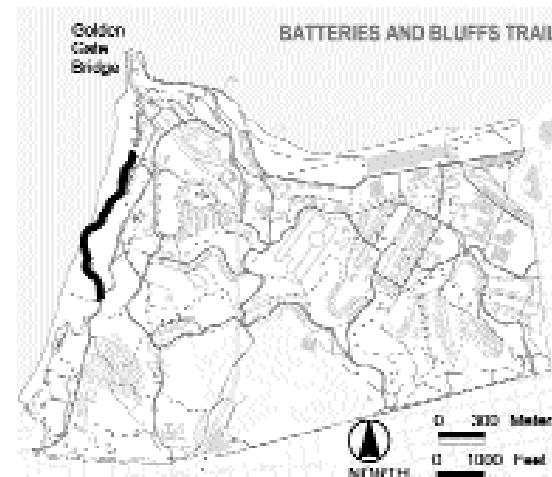
- A new multi-use trail from Crissy Field to Mountain Lake.

Alternative D would provide:

- A new pedestrian trail from Crissy Field to Washington Boulevard, connecting to the multi-use trail at Mountain Lake.

Batteries and Bluffs Corridor

The new Batteries and Bluffs Corridor would provide a pedestrian trail from Battery Boutelle to Baker Beach and Battery Crosby, replacing the many social trails that now contribute to the degradation of the area.



Proposed Improvements

All action alternatives would provide:

- A new trailhead with parking provided at Battery Godfrey.
- A new pedestrian trail upgraded from the social trail from North Baker Beach to Battery Godfrey trailhead.

Variations Between Alternatives

In addition to the above improvements, Alternative B would provide:

- A new challenging pedestrian trail from Battery Boutelle to Battery Crosby to North Baker Beach.

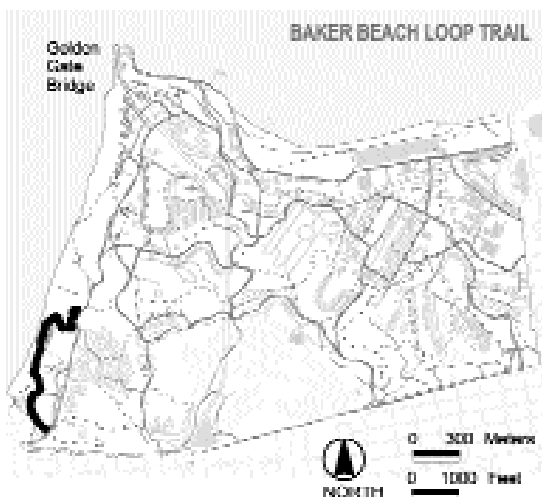
Alternative C would provide:

- No pedestrian trail from Battery Crosby to North Baker Beach.

Alternative D would provide:

- No pedestrian trail from Battery Crosby to North Baker Beach.
- A new pedestrian trail on Battery Crosby service road.
- A new pedestrian trail from Battery Marcus Miller to north Baker Beach.

Baker Beach Corridor



The new Baker Beach corridor would access south Baker Beach, which lies at the foot of rugged serpentine cliffs south of the Golden Gate. The 1.6 kilometer (1 mile) beach provides views of the Golden Gate Bridge, Marin Headlands, and Land's End. A multi-use trail would provide an accessible

route from the California Coastal Trail and the 25th Avenue Gate for visitors who wish to sightsee, fish, beachcomb, picnic, or visit a coastal battery. Pedestrian trail connections to the Lobos Creek Valley Trails would also be available on this corridor. A trailhead would be provided at the Baker Beach picnic area.

Proposed Improvements

All action alternatives would provide:

- A new trailhead at the south Baker Beach picnic area to serve multiple trails via Baker Beach.
- A new multi-use trail to connect Lobos Creek trailhead to Baker Beach and the Coastal Trail just north of Pershing Drive.
- A beach access route from the beach parking lot to the high tide line.
- A new accessible pedestrian loop trail encircling the picnic area.

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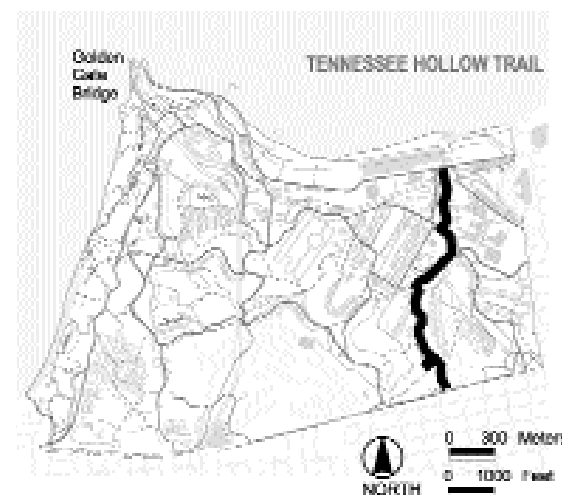
In addition to the above improvements, Alternatives B and C would provide:

- A new multi-use trail on the west side to the parking area and Battery Chamberlin.

Alternative D would provide:

- A new pedestrian trail on the west side of the parking area and Battery Chamberlin.

Tennessee Hollow Corridor



The new Tennessee Hollow Corridor would connect recreational areas at the south side of the Presidio, (e.g. Julius Kahn Playground) through the Tennessee Hollow watershed to Crissy Marsh. El Polin Spring, the source of fresh water for the Spanish Presidio, lies at the head of Tennessee Hollow. In 1898, the First Tennessee Volunteer Infantry Regiment camped there, and today visitors often picnic in this place of quiet retreat. The NPS and Trust have plans to restore this

historic watershed from El Polin Spring to the restored tidal marsh at Crissy Field. A new trail would follow one of the three tributaries to the point where they converge above the Lovers Lane footbridge, and from there to the marsh at Crissy Field. Trailheads would be provided at Julius Kahn playground, Lincoln Boulevard/Girard Road, and Mason Street.

Proposed Improvements

All action alternatives would provide:

- Trailheads at Julius Kahn Playground, Lincoln Boulevard near Funston Avenue, Halleck Street at Mason Street, and Crissy Field Beach.
- A new trail corridor developed in coordination with Tennessee Hollow restoration plans.
- A connection to the Golden Gate Promenade and Crissy Field Beach trailhead via the existing pedestrian trail.
- Spur trails with overlooks to view wetland and riparian environments.
- Upgrades to Halleck Street to include bike lanes on both sides of the street, if feasible.

Variations Between Alternatives

In addition to the above improvements, Alternative B would provide:

- A new pedestrian trail east of Halleck Street from Lincoln Boulevard to the Mason Street bikeway and path.

Alternatives B and C would provide:

- A new pedestrian trail from Julius Kahn playground to Presidio Boulevard, connecting via a multi-use trail to Funston Trailhead at Lincoln Boulevard

Alternative C would provide:

- A new multi-use trail east of Halleck Street from Lincoln Boulevard to the Mason Street bikeway and path.

Presidio Trails & Bikeways master plan

Overall Trail Network

In addition to improving and increasing corridors within the Presidio, each action alternative would improve overall connectivity by providing an integrated trail network. In the descriptions and illustrations which follow, this network is described in detail. Quantification of the difference between the alternatives is provided in Table 4.1.

Alternative A: No Action

The No Action Alternative would maintain the Presidio's current trails and bikeways network over the next 20 years. This alternative would not construct any new trails or bikeways, but would include continued maintenance. The alternative is illustrated in Figure 4-1A. Figure 4-1B illustrates the existing road-based bicycle routes in the Presidio.

Under this alternative:

- No comprehensive changes or major new trail building activities would take place.
- No new multi-use trails or off-street bicycling opportunities would be provided.
- Park facilities and operations would continue using current procedures.

		Alternative A		Alternative B		Alternative C		Alternative D		
Trail Type	km	miles	km	miles	km	miles	km	miles		
Pedestrian Trails		16.5	10.2	31.0	19.2	16.9	10.5	44.5	27.6	
Multi-use Trails		9.8	6.1	32.4	20.1	42.1	26.1	17.6	10.9	
Bikeways (Class II bike lanes)			3.7	2.3	23.2	14.4	23.2	14.4	20.8	
12.9 Social Trails (not included in total)		(15.9)	(9.9)	0	0	0	0	0	0	
Total Designated Trails:			30.0	18.6	86.6	53.7	82.3	51.0	82.9	
51.4										
Trails Modification										
New Trails		n/a	n/a	27.8	17.4	20.3	12.7	24.8	15.5	
Pedestrian Trails Converted to Multi-use Trails			n/a	n/a	4.0	2.5	57.7	4.8	3.4	
2.1 Multi-use Trails Converted to Pedestrian Trails			n/a	n/a	0	0	0	0	0.5	
0.3 Social Trails Converted to Pedestrian Trails			n/a	n/a	3.6	2.3	2.1	1.3	2.0	
1.2 Social Trails Converted to Multi-use Trails		n/a	n/a		1.0	0.6	4.4	2.7	0.5	0.3
Service Roads Converted to Multi-use Trails		n/a	n/a		0.8	0.5	0.9	0.5	0.9	0.5
Total Newly Designated Trails:			n/a	n/a	40.6	25.21	36.3	22.5	39.4	24.4

Note: All Action Alternatives will close most social trails and/or convert them to pedestrian or multi-use trails.

Table 4-1. Trails and Bikeways by Alternative

- Limited closure of certain social trails might occur as part of ongoing maintenance operations to implement the Presidio VMP.

Alternative A's overall concept is to maintain the status quo and to preserve the basic framework of existing vehicular, pedestrian, and bicycle use. In emphasizing the traditional uses of the Presidio, Alternative A would maintain the 16.3 kilometers (10.2 miles) of existing pedestrian trails, 9.8 kilometers (6.1 miles) of multi-use trails, and 3.7 kilometers (2.3 miles) of bikeways. A minimum of 15.8 kilometers (9.9 miles) of significant social trails would remain substantially unchanged, but would be subject to incremental closures over time as directed by the Presidio VMP.

Alternative B: Mixed Use

This alternative features the widest range of trail types and connections, and would provide a mix of urban and natural visitor experiences to emphasize both traditional uses of the Presidio, and the Presidio's unique location in a large metropolitan area. The alternative is illustrated in Figure 4-2A. Road-based bicycle routes provided in both Alternatives B and C are shown in Figure 4-2B.

Under this alternative:

- Many opportunities would be provided for

safe and enjoyable trails and bikeways experiences for the widest variety of park users.

- New pedestrian and multi-use trails would provide access for people with disabilities to many Presidio destinations.
- Off-street bicycling routes on many multi-use trails would be provided for family and recreational bicyclists.
- Social trails which may be hazardous or threaten resources would be closed, consistent with the VMP. The social trails would be replaced with more sustainable trails providing access to the same park destinations

Under Alternative B:

Alternative B would provide:

- 86 kilometers (53.7 miles) of total designated trails.
- 30.7 kilometers, or 19.2 miles of primary and secondary pedestrian trails.
- 32.2 kilometers, or 20.1 miles of multi-use trails.
- 2.3 kilometers, or 14.4 miles of bikeways
- A minimum of 8 kilometers (5 miles) of

social trails would be closed and 7.7 kilometers (4.8 miles) would be improved and designated as official trails

Alternative C: Shared Use

This alternative provides the greatest number of multi-use trails that access major points of interest in the Presidio. The alternative emphasizes wider, multi-use trails designed to accommodate large numbers of users. The alternative would provide the fewest number of opportunities for dispersed visitor experiences, such as enjoying quiet solitude. The alternative is illustrated in Figure 4-3. Road-based bicycle routes provided in both Alternatives B and C are shown in Figure 4-2B.

Under this alternative:

- The largest number of off-street bicycling opportunities would be provided for family and recreational bicyclists on shared multi-use paths.
- The fewest pedestrian-only trails would be provided.

Alternative C would provide:

- 81.6 kilometers (51 miles) of total trails.
- 16.8 kilometers, or 10.5 miles of pedestrian trails.

A minimum of 8.6 kilometers (5.4 miles) of social trails would be closed and 7.2 kilometers (4.5 miles) would be improved and designated.

Alternative D: Dispersed/Single Use

The dispersed alternative emphasizes separation of pedestrians and bicycles. It offers significant opportunities for pedestrians to experience natural and cultural resources in an atmosphere of quiet solitude. It would provide limited accessible trails and the least amount of off-street recreational bicycle opportunities. The alternative is illustrated in Figure 4-4A. Figure 4-4B shows road-based bicycle routes provided in this alternative.

Under this alternative:

- The most pedestrian trails would be developed to provide the greatest degree of physical challenge for pedestrians, the greatest variety of pedestrian experiences, and the greatest opportunity for pedestrian travel throughout the Presidio.
- Many opportunities would be provided for safe and enjoyable trails and bikeways along such major corridors as the Coastal Trail and the Presidio Promenade.

- A limited number of multi-use trails would be provided (about half the number of miles of multi-use trails as compared to other action alternatives).

Alternative B would provide:

- 42 kilometers, or 26.8 miles of multi-use trails.
- 23 kilometers, or 14.4 miles of bikeways.

The alternative's key concept is to provide an individual experience of the Presidio and to permit more opportunities for solitude. It emphasizes narrower pedestrian linkages and connections. Alternative D would preserve the Presidio's established trail corridors.

In general, trail connections would not be as consistent and continuous as the other action alternatives, such as along the Juan Bautista de Anza National Historic Trail and the Bay Area Ridge Trail corridors.

Alternative D would provide:

- 82 kilometers (54 miles) of total trails.
- 44.2 kilometers (27.6 miles) of pedestrian trails.

- 17.5 kilometers (10.9 miles) of multi-use trails.
- 19.5 kilometers (12.2 miles) of marked bike lanes (Class II).
- A minimum of 8 kilometers (4.8 miles) of social trails would be closed and 8 kilometers (4.8 miles) would be improved as designated trails.

1 Introduction

2 Purpose & Need

3 Trail Classifications & Design Guidelines

4 Alternatives

5 Environmental Consequences

6 Consultation and References

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Figure 4-1A. *Alternative A: No Action*

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Back of 4-1A

Figure 4.1B

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Back of 4.1B

Figure 4-2A. *Alternative B: Mixed Use*

Presidio Trails & Bikeways master plan

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Back of 4.2A

Figure 4-2B. Alternatives B and C: On-road Bicycle Paths

Presidio Trails & Bikeways master plan

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Back of 4.2B

Figure 4-3. *Alternative C: Shared Use*

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Back of 4.3

Figure 4-4 A. *Alternative D: Dispersed/Single Use*

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Back of 4.4A

Figure 4-4B. *Alternative D: On-road Bicycle Routes*

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COMPARISONS AT KEY LOCATIONS

To help visualize changes, illustrations comparing proposed development to existing conditions at key locations are shown here. The selected locations are not comprehensive, but are representative of proposed trails and bikeways development.

California Coastal Trail: Lincoln Boulevard at Pershing Drive

The trail corridor section occurs just north of the Pershing Drive North intersection on Lincoln Boulevard. Figure 4-5 illustrates existing conditions. Figure 4-6 illustrates the proposed development for Alternatives B and C. The total width of the existing developed area, from the social trail's outside edge just west of the barrier rail to the drainage swale edge on the east, is approximately 15 meters (49 feet). By re-striping the traffic lanes to a width of 3.3 meters (11 feet), a multi-use trail and bike lanes in both directions can be accommodated within the current developed width. Detailed evaluation should be conducted during design to determine whether greater separation between the trail and roadway could be provided, or if a barrier rail is required.

Alternative D, Dispersed/Single Use Alternative, would provide a pedestrian trail instead of a multi-use trail at this location.

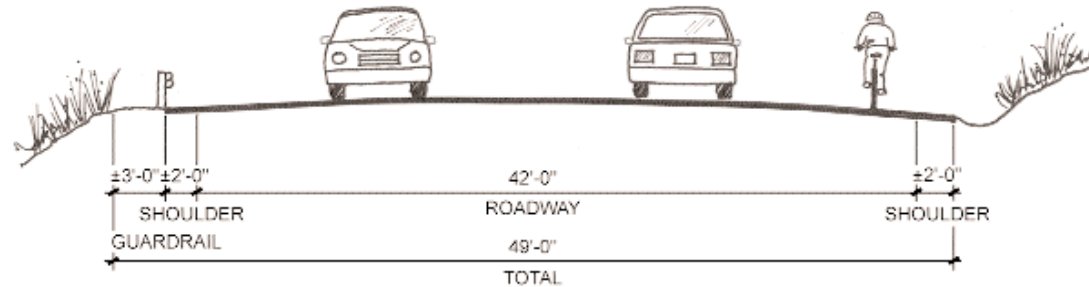


Figure 4-5. Existing Conditions at Lincoln Boulevard at Pershing Drive North

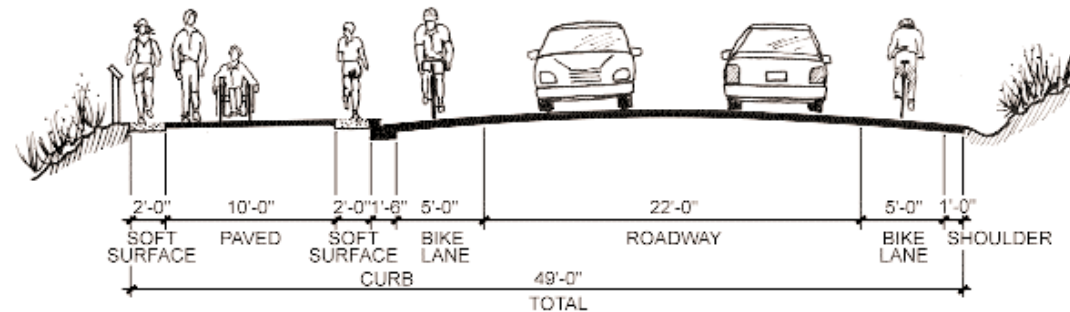


Figure 4-6. Proposed Development at Lincoln Boulevard at Pershing Drive North

Presidio Trails & Bikeways master plan

Coastal Trail: Lincoln Boulevard at Kobbe Avenue

The developed width of Lincoln Boulevard where Kobbe Avenue intersects is approximately 17.6 meters (58.5 ft.) between the existing restoration area protection fence on the west and the drainage swale edge on the east (Figure 4-7). By re-striping the roadway consistent with Presidio traffic calming measures, bike lanes, 3.3 meter (11-foot) vehicle lanes, and a standard multi-use trail can be accommodated in all Action Alternatives (Figure 4-8). A buffer planting would be provided between the trail and road. The buffer planting would help reduce the barrier rail's visual impact. The planting would vary slightly in width, depending on location constraints.

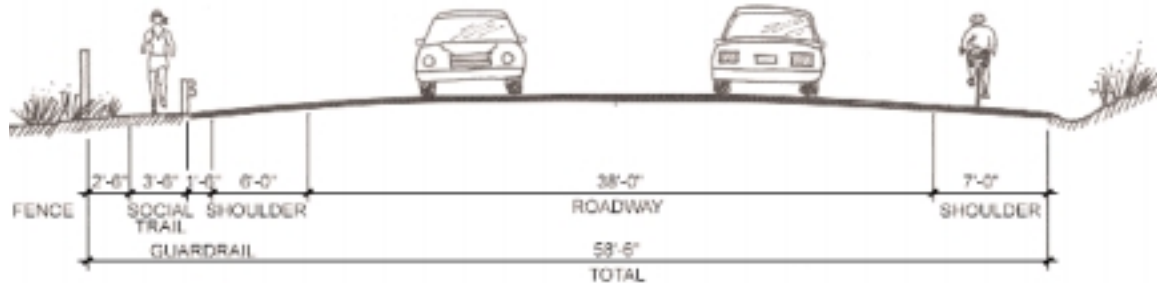


Figure 4-7. Existing Conditions at Lincoln Boulevard at Kobbe Avenue

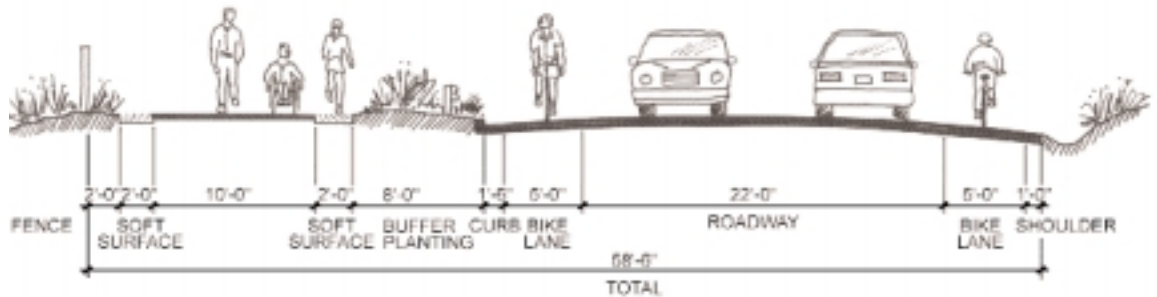


Figure 4-8. Proposed Development at Lincoln Boulevard at Kobbe Avenue

Coastal Trail: Lincoln Boulevard at Washington Boulevard

The existing corridor just south of where Washington Boulevard intersects Lincoln Boulevard is very narrow, totaling only 9.6 meters (32 feet) (Figure 4-9). It is constrained by trees and slopes on the west and a short steep slope and the Washington roadbed on the east. This condition exists for a distance of 30 to 60 meters (100 to 200 feet). A standard multi-use trail cannot be constructed without reconfiguring Washington Boulevard and excavating into the hillside, providing a trail structure on the west, or some combination of these. In this section of the corridor, all action alternatives would widen the roadway on the east to maintain safe bike lanes in each direction, but this constricts the Coastal Trail to only a narrow pedestrian trail (Figure 4-10). On the trail, bicyclists would be required to dismount and walk their bikes in order to protect pedestrians on this multi-use trail section.

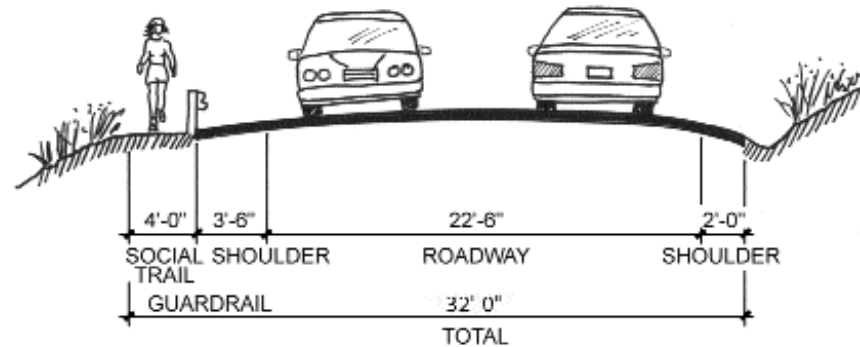


Figure 4-9. Existing Lincoln Boulevard at Washington Boulevard

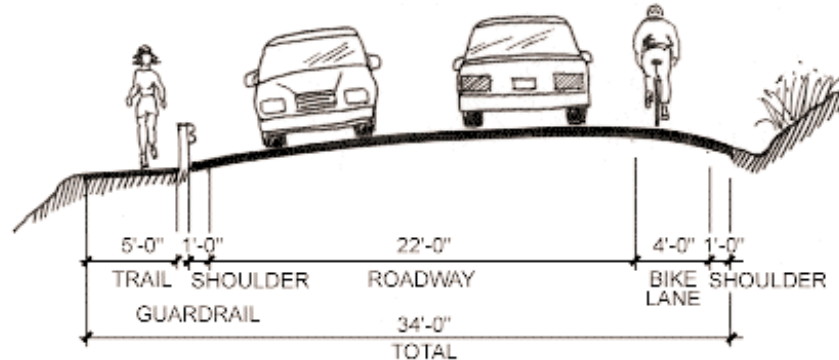


Figure 4-10. Proposed Lincoln Boulevard at Washington Boulevard

Presidio Trails & Bikeways master plan

Presidio Promenade: Lincoln Boulevard at Crissy Field Avenue

The roadway on Lincoln Boulevard just north of the Crissy Field Avenue intersection is wider than necessary for two lanes of traffic, currently leaving room for only a narrow social trail on the east side (Figure 4-11). By re-striping the roadway consistent with Presidio traffic calming measures, bike lanes and a minimum standard multi-use trail would be accommodated in all Action Alternatives (Figure 4-12). During design, opportunities for greater separation between the roadway and trail should be investigated.

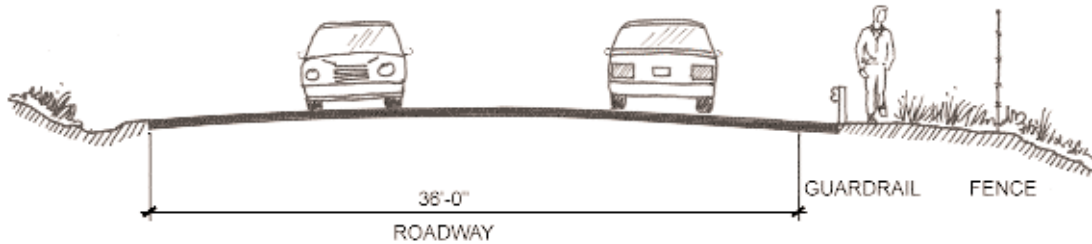


Figure 4-11. Existing Conditions at Lincoln Boulevard at Crissy Field Avenue

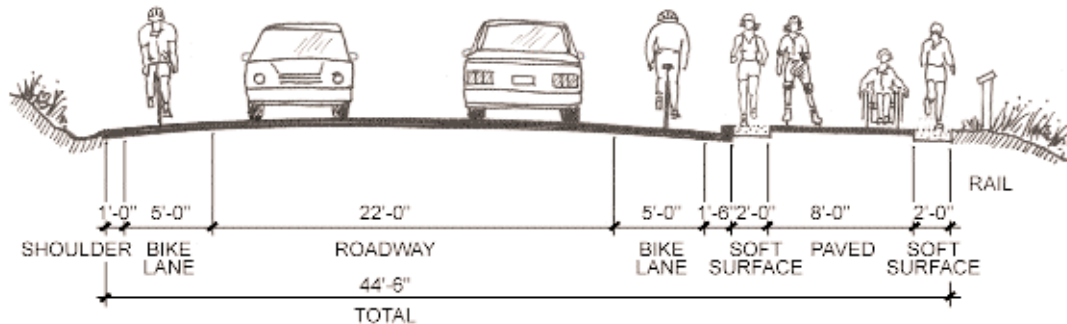


Figure 4-12. Proposed Development at Lincoln Boulevard at Crissy Field Avenue

Golden Gate Promenade at Fort Point Extension

Extension of the Golden Gate Promenade from the Torpedo Wharf Mine Depot to Fort Point along Marine Drive is constrained between the breakwater and the foot of steep slopes (Figure 4-13). Bicyclists would continue to share the roadway in this section. Vehicular traffic is generally slow and the number of cars is limited. To increase pedestrian safety, a designated pedestrian trail is proposed in all Action Alternatives, delineated by a new waterfront rail and surfacing to match the rest of the promenade (Figure 4-14).



Figure 4-13. Existing Conditions at Golden Gate Promenade at Fort Point Extension



Figure 4-14. Proposed Development at Golden Gate Promenade at Fort Point Extension

Ecology Trail Corridor at Arguello Boulevard

Arguello Boulevard is a narrow steep road, popular with cyclists and runners for its direct connection from the Main Post area to the Arguello Gate (Figure 4-15). A portion of the route is immediately adjacent to housing on a steep upslope, and separated from the street by a historic retaining wall. An uphill bike lane is proposed in all Action Alternatives with a minimum standard multi-use trail on the east side (Figure 4-16).

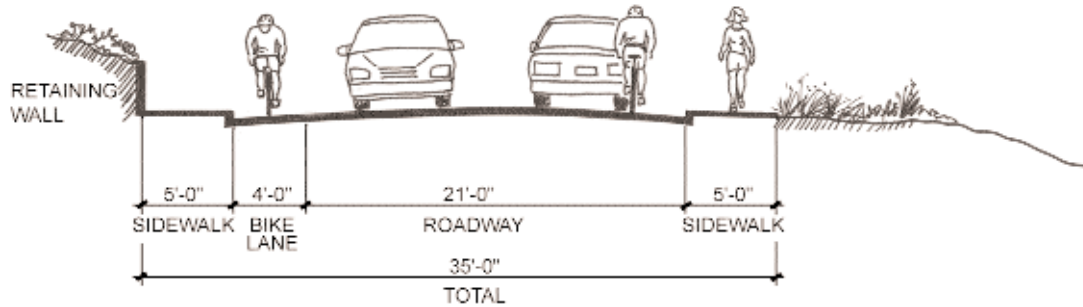


Figure 4-15. Existing Conditions at Ecology Trail Corridor at Arguello Boulevard

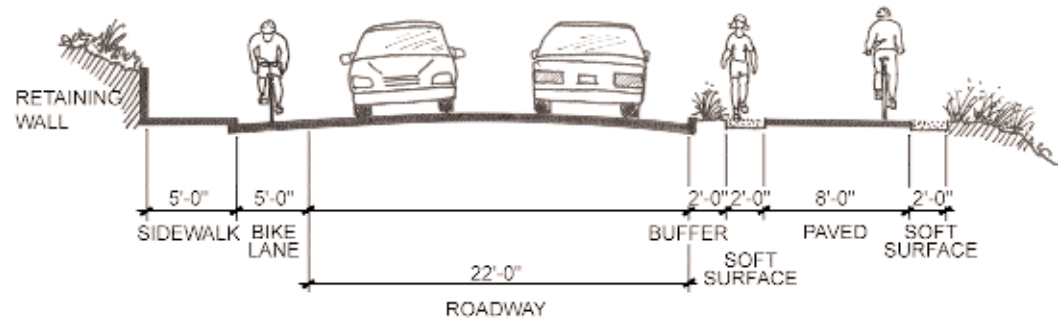


Figure 4-16. Proposed Development at Ecology Trail Corridor at Arguello Boulevard

Bay Area Ridge Trail at Washington Boulevard

Existing conditions are illustrated in Figure 4-17. On this stretch of Washington Boulevard, Alternatives B and C replace the existing perpendicular parking with parallel parking (Figure 4-18). A multi-use trail is located on the north side. Alternative D, Dispersed/Single Use, would maintain existing conditions.



Figure 4-17. Existing Condition of Bay Area Ridge Trail Corridor at Washington Boulevard

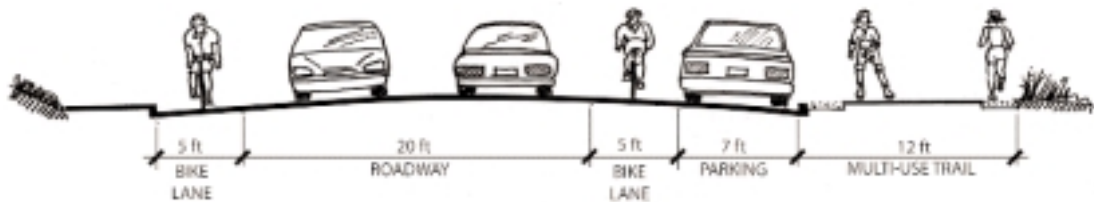


Figure 4-18. Proposed Development of Bay Area Ridge Trail at Washington Boulevard

Juan Bautista de Anza Trail at Battery Caulfield Road

This section of the Anza Trail, just northwest of the former Public Health Service Hospital, exceeds a five percent grade and is constrained by a Lessingia restoration area immediately west of the road (Figure 4-19). To provide an accessible trail, all action alternatives B and C propose moving the roadway to the east, and widening and re-grading 48- to 90-meters (160 to 300 feet) of the roadway to provide a multi-use trail on the west side (Figure 4-20). Since Battery Caulfield Road would remain a low-volume street for cars, bicycles would share the road.

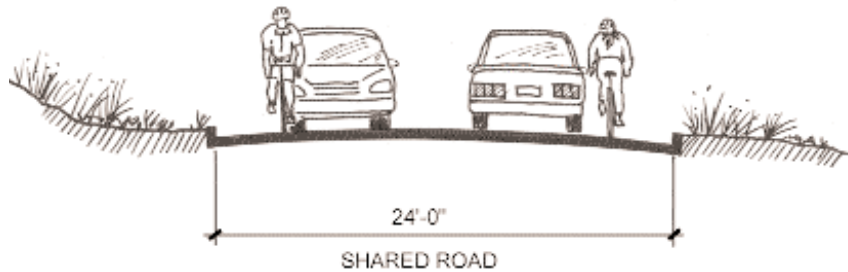


Figure 4-19. Existing Condition of Juan Bautista de Anza Trail at Battery Caulfield Road

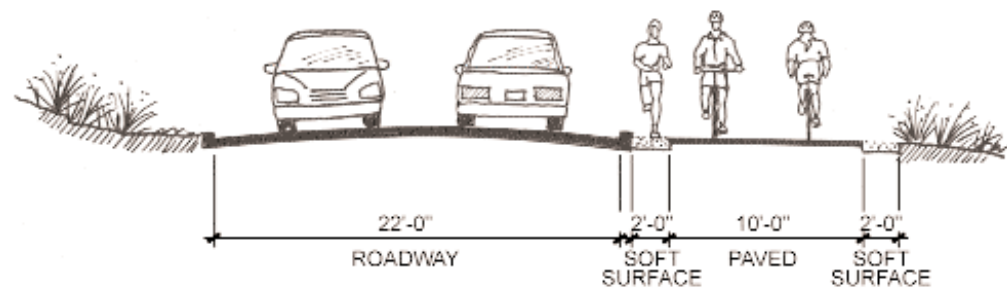


Figure 4-20. Proposed Development of Juan Bautista de Anza Trail at Battery Caulfield Road

Environmentally Preferable Alternative

NPS procedures require that the environmentally preferable alternative be identified from the range of alternatives considered in the EA. The environmentally preferable alternative is the alternative that best promotes the NEPA's goals. The Presidio Trust and GGNRA are proposing reasonable alternatives to enhance visitor use and experience, support resource management, contribute to a comprehensive transportation strategy, encourage sustainable design and construction, and promote stewardship. The evaluation of the alternatives in Chapter 5 suggests that the Mixed Use Alternative (the NPS' and the Trust's preferred alternative) is the environmentally preferable alternative because it best enhances visitor use and experience by providing diverse recreational and educational experiences, minimizing user conflicts, improving connections to regional trails, and ensuring access to the Presidio's outstanding natural and cultural resources. This alternative also provides the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable or unintended consequences.

The other alternatives were not identified as environmentally preferable for the following reasons:

- The Shared Use Alternative would actively promote bicycles as a transportation alternative, providing family, visitor and commuter access to major destinations, and therefore best contributes to a comprehensive transportation strategy. However, this alternative would also require the most significant modifications to open land by adding the most linear miles of multi-use trails; this would add the greatest increase in hardened surface on currently undeveloped land.
- The Dispersed/Single Use Alternative would provide the greatest variety of experience and physical challenge for pedestrians. However, this alternative would not provide for consistent and continuous trail connections and therefore would not encourage a reduction in automobile use to and from, and within, the Presidio.
- The No Action Alternative would avoid construction effects, but would not attain the widest range of beneficial uses identified in Chapter 5 and would not enhance visitor use and experience.

